EXHIBIT 1
BELLSOUTH OSPCM™
OUTSIDE PLANT CONSTRUCTION MANAGEMENT

FUNCTIONAL SPECIFICATION MODULE:

Description of System

The Outside Plant Construction Management (OSPCM™) system was developed by BellSouth and is used in conjunction with the construction of communication facilities.

This transaction describes the processes required to automatically authorize and approve contractor work tasks entered into Job Entry - Other. These tasks may create a separate Routine Work authorization or be accomplished under an Engineering Work authorization.

Routine Work Authorize and Approval

Provides methods to automatically authorize and approve work tasks entered into Job Entry – Other if the individual logged on has the proper authority level. If a higher level is required, notify the user and provide ability for such approval. Establish tracking of completed work to ensure that continued correct approval levels are maintained.

Process Flow:

(1)   Use the security log on process to obtain the individual user CUID for approval level processing.

(2)   Create tables in OSPCM to set the allowed dollar approval limits for each Management level for the type work in process. The data for this table should be obtained from the BST Network Approval Schedule.

(3)   Calculate the estimated dollar values of the proposed work tasks during data entry and use at save to determine if individual logged on has correct level for dollar amount.

(4)   If dollar level in prior calculation is correct do an automatic authorize and approval (else)

If dollar level in the prior calculation is above allowed level for individual logged on, present a warning message that higher level approval is required.

(5)   The above warning message will not prevent work requests from going to the contractor but higher level approval should be obtained as soon as possible and in any event contractor payment will not be processed until correct approval is made.

(6)   Provide for tracking of completed tasks to avoid exceeding approval limits after work starts. Need to track completion expenditures and cumulate for the job.

(7)   Should over expenditures require higher approval a separate area is available to provide users with the job specifics so that a listing of any job in need of higher approval appears and may be opened to see the dollar details.

(8)   Provides a search capability and the means to effect the approval. Also gives status of the job.

Benefits

The process will reduce much manual calculations and record keeping for each set of tasks by management level. This will maintain compliance with Corporate contract approval rules.

FUNCTIONAL SPECIFICATION MODULE: JOB ENTRY

Description of System

The Outside Plant Construction Management (OSPCM ^{TM}) system was developed by BellSouth and is used in conjunction with the construction of communication facilities. This transaction describes the processes required to schedule the work tasks necessary to add, change or remove BellSouth outside plant facilities. This transaction is dependent on the OSPCM^{TM} Configuration process.

Configuration Process

This is the input to the scheduling process. This process creates a scheduling networks. The Configuration process determines the type of work on a task or substep and assigns a resource. This process also groups the work into logical groups called scheduling activities and then places them in a sequence based on the scheduling sequence codes. This process establishes a Date Type (start or completion), crew size, a priority and completion date for the entire scheduling network based on user input or default time periods. The last thing that configuration does is to establish start and end dates on each scheduling activity using the Critical Path Method. (CPM).

Scheduling Batch Process

(1)   This process creates a schedule for each resource group (Supervisor group) and contains work for 20 weeks. The scheduling process will never schedule work on a date that is past. No work scheduled in weeks 21 and greater.

(2)   This is a batch process that always runs on Saturday night and can be run at the user's discretion on any and all other nights of the week. This process creates a priority list of scheduling activities based on adjusted CPM start and end dates, priorities, date types and activity dependencies. The system will adjust the CPM dates so that when the scheduling process runs no activity will be scheduled in the past. (If it runs tonight then the earliest schedule start date on any activity will be tomorrow's date.)

(3)   This process creates resource availability tables for each work group or resource pools (Supervisor Group). Each worker has a profile in OSPCM which identifies the number of hours/day and the days/week that he is available to work. This profile also includes any vacation, training or miscellaneous off time.

(4)   After establishing the priority list and the resource availability tables then the process simply schedules the first activity based on the available resources for the CPM dates. If resources are not available for a particular CPM date then the system will move the activity out in the schedule until resources can be found. All activities are scheduled from the priority list in order even if resources are not available on the CPM dates.

The scheduling module also contains the ability to adjust information on scheduling networks. This information includes desired completion dates, crew size, resource groups and priorities. This information is sued to establish CPM dates and prioritize the activities during the scheduling batch process. The user also has the ability to move work tasks from one activity to another, change the sequence of work by changing the activity dependencies.

The user also has the ability to manually move work into or out of the schedule within week one or week two. The user can also lock down work so that the scheduling process will ignore resource availability when scheduling the locked down activity.

Scheduling reports and graphs are available in the scheduling module including individual schedules for each resource group.

FUNCTIONAL SPECIFICATION MODULE

Materials Management:

Materials Management module of OSPCM is a comprehensive mechanized ordering system that requires little manual intervention. This module's predecessor was the Major Apparatus and Cable System (MACS). MACS had some similar features that required substantial manual intervention where Materials Management is mechanized. In the following pages the bold paragraphs are unique to OSPCM Materials Management.

Business Solution 1

The Materials Management Business Solution Area I deals with satisfying a material requirement on an Outside Plant Construction Engineering Work Order (EWO) or a Plant Work Order (PWO) job with new material. All new material is obtained through a real-time interface with OrderMaster, the front-end interface to REGIS and CAPRI. All PIDed items, those with a Product Identifier, are sent from OrderMaster to REGIS to be fulfilled, if possible, by a BellSouth Telecommunications (BST) warehouse. All non-PIDed items are sent from OrderMaster to CAPRI to be fulfilled by an outside vendor, such as AT&T. This Business Solution area is broken down into eight sections:

(1)   Calculate Order Date
(2)   Identify Today's Requirements
(3)   Order Material Requirements

(4)   View an Order

(5)   Receive Shipment Details

(6)   Receipt Ordered Material

(7)   Send Receipt Notification to CAPRI

(8)   Set Preferences

Each section is briefly described and then broken down into the actual navigational flow through the presentation and/or process. The purpose of this document is to gain consensus as to the deliverable for Materials Management Business Solution Area I.

The first section deals with calculating the order date for a material requirement. This process is called by the OSPCM Scheduling application each time a scheduling activity obtains a new schedule start date.

The second section deals with identifying material requirements that need to be satisfied today so that the material is available when the job is scheduled to be worked. An automated process will execute each night to identify those requirements for any open (i.e., not closed, cancelled, or completed) EWO-job that has been approved. (A PWO job will not be automatically identified as needing requirements to be fulfilled. These requirements must be identified manually and ordered on an individual basis.) The process will flag any open substep within that job that needs material and whose order date is less than or equal to today as having a material requirement that needs to be satisfied today. Each flagged substep may later be retrieved by a Visual Basic (VB) presentation window.

The third section deals with satisfying a material requirement with a new order. This area allows you to retrieve requirements for a specific job or to retrieve those requirements identified as needing to be satisfied today. The former is the method of choice is an emergency situation. The system provides a presentation that allows you to display a specific job or a list of jobs that have material requirements that need to be satisfied today. You then select those requirements you wish to order. The selected requirements are pre-processed and grouped into one or more orders/order items due to aggregation and various other ordering rules. The system provides a presentation that allows you to view each order created before it is sent to OrderMaster. Appropriate changes can be made at this time, such as deaggregating requirements aggregated to an order item within the order or changing the location to which an order should be shipped. You then send each order to OrderMaster

separately. OrderMaster returns an OrderMaster Number ("Q" Number) if the order was processed successfully, indicates that the order has been queued, or indicates that an error was found.

The fourth section involves viewing an order which has already been sent to OrderMaster. This area allows you to retrieve a specific order and view details about that order and its associated line items. You may display a specific order via its OrderMaster Number, a Purchase Order Number or Select Ticket Number on which the order was or will be fulfilled, or via the Job Number for which the material was ordered.

The fifth section involves receiving shipment details from the procurement systems for an ordered item. An automated process will run each time shipment details are received from either REGIS or CAPRI. Shipment details are received from REGIS when a select ticket is created, each time a select ticket number changes (e.g. future day ticket to current day ticket), when the quantity or material to be shipped is changed, when a select ticket item is cancelled, or when the select ticket is loop closed indicating that the material has been shipped. Shipment details are received from CAPRI when a purchase order is created, when a shipment date has changed, or when a purchase order item is cancelled.

The sixth section involves receipting ordered material into inventory once the material has been shipped and delivered to the appropriate location. You have the choice of retrieving items to be receipted either by the OrderMaster Number on which the material was ordered or by the Purchase Order Number (vendor orders) or Select Ticket Number (BST warehouse orders) on which the material was shipped. The system provides a presentation that allows you to display order items within a specific order, order items shipped on a specific Purchase Order, or order items shipped on a specific Select Ticket. A list of items already receipted or to be receipted is displayed. T he material can be receipted into inventory as unassigned material, receipted into inventory and assigned to the appropriate substep within the job for which it was ordered, or receipted into inventory and flagged as material to be returned.

The seventh section involves sending receipt notification to CAPRI, the system that processes outside vendor orders. All material ordered from an outside vendor must be reported to CAPRI after it has been received into inventory so that CAPRI may authorize payment to the vendor. This section describes MATERIALS MANAGEMENT's daily

interface to report order receipts to CAPRI. Since this is an automatic process initiated by the system on a daily basis, there is no user interface.

The eighth section involves setting user preferences. The system provides a presentation that allows you to set various preferences, such as the toolbar's position and a default location to be used throughout the application.

The navigation through the Materials Management application is done from the Materials Management application window, which has a button toolbar and pulldown menus to drive user selections.

The application window for Materials Management is shown in Fig. 9.

The first eight toolbar buttons on the OSPCM Material window apply only to Materials Management. Their functions are as follows:

(1)   Show Today's Requirements

(2)   Show a Job's Needed Requirements

(3)   Show All Requirements for a Job

(4)   Receipt an Order

(5)   Show Inventory Item

(6)   Inventory Scan

(7)   Show Transactions

(8)   Show an Order Summary

The remaining toolbar buttons are standard buttons that appear in all OSPCM applications. The first, second, fourth, and eighth toolbar buttons are described in this document. The other Materials management Buttons are described in later business solutions.

Business Solution 2

The MATERIALS MANAGEMENT Business Solution Area II deals with satisfying a material requirement on an Outside Plant Construction Engineering Work Order (EWO) or a Plant Work Order (PWO) job with existing inventoried material. This method

of satisfying a requirement may be used instead of ordering new material. This Business Solution area is broken down into three (3) sections:

(1)   Satisfy a Material Requirement with Inventory

(2)   Approve a Transfer Request

(3)   Receipt Transferred Material

Each section is briefly described and then broken down into the actual navigational flow through the presentation. The purpose of this document is to gain consensus as to the deliverable for MATERIALS MANAGEMENT Business Solution Area II.

The first section deals with retrieving material requirements that need to be satisfied and satisfying those requirements with either an assignment or a transfer request. The procedures for retrieving requirements are presented in Business Solution Area I (BS1OVER.DOC). When material requirements are displayed, an indicator is shown for each requirement that can be satisfied from existing inventory at the requirement's inventory site. You may choose to make assignments from the inventory found or initiate another inventory scan to search for suitable substitutions for which assignments or transfer requests may be made.

The second section deals with approving a transfer request to satisfy a material requirement or rejecting a transfer request. You may display simultaneously the transfer requests that need to be approved by your inventory site and the transfer requests that have been approved by your inventory site but have not been received. You may transfer the inventory item requested, transfer a substitute for the inventory item requested, reject the transfer request, or cancel an approved transfer request that has not been received.

The third section deals with receipting transferred material. You may display simultaneously the inventory items that have been transferred to your inventory site but have not been received into your inventory and the transfer requests that have been made by your inventory site but have not been approved for transfer. You may receipt an inventory item that has not been received or cancel any transfer request that has not been approved.

Business Solution 3

The MATERIALS MANAGEMENT Business Solution Area III deals with the management of inventory. This Business Solution area is broken down into 19 sections:

(1)   View a Job's Material Requirements

(2)   Issue Material Needed on a Job

(3)   View an Inventory Item

(4)   View Assignments

(5)   Junk an Inventory Item

(6)   Split a Reel of Cable

(7)   Adjust an Inventory Balance

(8)   Change the Status of an Inventory Item

(9)   Exempt an Inventory Item

(10)   Return an Inventory Item;

(11)   Transfer an Inventory Item

(12)   Relocate an Inventory Item

(13)   Add an Inventory Item

(14)   View Issues

(15)   View Material Inventory Transactions

(16)   Run an Inventory Scan

(17)   Process Material Usage;

(18)   Report Material Inventory Transactions to Asset Management;

(19)   Report reconciliation File to Asset Management.

Each section is briefly described and then broken down into the actual navigational flow through the presentation. The purpose of this document is to gain consensus as to the deliverable for MATERIALS MANAGEMENT Business Solution Area III.

The first section deals with viewing a job's material requirements. This allows you to monitor the status of the material needed to work an approved job. You can view each requirement within the job, showing how much material is required, how much has been procured, how much has been assigned, how much still needs to be procured, and how much

has been issued. You can also view any orders, shipments, transfer requests, or transfers made to satisfy the requirements that have not yet been delivered.

The second section deals with issuing the material needed on a job. Issuing material allows you to keep track of inventory that has been taken off the inventory yard to be used on a job. The issued inventory item is now considered "at site". The issue indicates to whom the material was issued, when the material was issued, and for which job the material was issued. Issues may be closed when the material is brought back to the inventory yard or when the substep is completed and its material disbursed.

The third section deals with viewing inventory items for which you have responsibility. These inventory items may be located at your inventory site, at an alternate storage location, or at a job site. You can view information about a specific inventory item including its inventory status and associated balances. You can also use several functions to manage your inventory such as junking and adjusting an inventory balance. Each function is described in a different section of the document.

The fourth section describes the function of viewing assignments. You can view the requirements to which an inventory item is assigned and unassign the inventory item from selected requirements. Unassigning an inventory item indicates that the inventory item is no longer reserved for use on a specific job. This makes it available to be assigned to any other job within the Construction Management Center (CMC) that needs this type of material. If a job is cancelled or a requirement is deleted, the system automatically unassigns the associated inventory item. You might want to unassign an inventory item yourself because the material is damaged and cannot be used.

The fifth section describes the function of junking an inventory item. Junking an inventory item deletes the inventory item from the system and is usually done to clear a reel of cable. When cable is reported used (disbursed), the system automatically junks the remaining cable on the reel if the CMC responsible for the inventory item is using the auto-junk feature and the remaining quantity is unassigned and less than or equal to the auto-junk quantity set by the CMC. You might want to junk an inventory item yourself because you are working in a CMC that is not using the auto-junk feature or you are junking a non-cable inventory item.

The sixth section describes the function of splitting a reel of cable. Splitting a reel of cable creates a new inventory item. It involves moving some or all of the cable from a reel to a new reel or to a hand-coil. You might want to split a reel of cable because you physically need to have the cable in two different places at the same time.

The seventh section describes the function of adjusting an inventory item's balance. You can increase or decrease both the unassigned and surplus inventory balances following a physical inventory.

The eighth section describes the function of changing the status of an inventory item. You can move some or all of an inventory balance among the unassigned, surplus, and awaiting return statuses. You might want to move a spare unassigned balance to surplus to make it available to anyone in the BellSouth region or instead of returning undamaged material you might want to move it to the unassigned status so that it may be used to satisfy a requirement on a rush job.

The ninth section describes the function of exempting an inventory item. You can reclassify a surplus or unassigned inventory item as exempt material so that it no longer remains a part of your inventory records. This is usually done to make material available for use on maintenance type work.

The tenth section describes the function of returning an inventory item. You can return damaged or unwanted material to either a BellSouth Telecommunications (BST) warehouse or to an outside vendor, like Lucent.

The eleventh section describes the function of transferring an inventory item. You can transfer an inventory item from your inventory site to another inventory site when you do not have a formal transfer request to approve. The use of this function should be limited to times of natural disaster when you may need to move a lot of inventory to handle emergency jobs.

The twelfth section describes the function of relocating an inventory item. You can change the bin location of an inventory item in your inventory yard or, since you can only transfer inventory items between inventory sites, move an inventory item located at an alternate address back to your inventory site or vice versa.

The thirteenth section deals with adding an inventory item. You can add an inventory item by recovering the material from junk, by reclassifying the material from

exempt, by identifying the material as being needed on a Turn-Key job, by identifying the material as inventory converted from the Major Apparatus and Cable System (MACS), or by specifying the source of the material as "other". "Other" is used when you find material on your yard during a physical inventory and do not know where it came from. This function is also used by the BST emergency warehouses to replenish their emergency and consignment stock.

The fourteenth section deals with viewing issues. You can view open issues and return issued material. If all the material issued to you was not used, you may return the unused portion to the inventory site.

The fifteenth section describes the function of viewing inventory transactions. You can specify the transactions you want to view in several ways. One way is to specify the transaction number. Another way is to specify an inventory item (e.g., serial number 456789). A third way is to specify the type of transactions (e.g., junk transactions). Depending on the method chosen, you may be shown either a transaction scan results window or a transaction details dialog. The transaction scan results window displays a list of transactions starting with the most recent transaction. From here you may choose a transaction to view in greater detail. The transaction detail dialog displays additional information about the transaction such as who created the transaction and what job was affected by the transaction. This dialog allows you to "walk" the transaction chain backwards to the point the inventory item first became your responsibility (e.g., an order receipt) or forwards to the point the inventory item was no longer your responsibility (e.g., a disbursement).

The sixteenth section deals with scanning inventory. You can specify several options for creating an inventory scan report. The report is designed to aid in a physical inventory and may be viewed on your screen or may be printed.

The seventeenth section deals with processing material usage. Once material is placed in service, it is reported "used" by either a Telephone Company (TELCO) employee or by a contractor hired to do the work. Sometimes material is taken out of service and is put back into inventory. In both cases, if the material reported is tracked in inventory, the system must respond by either decreasing or increasing the appropriate inventory balance. This section describes how MATERIALS MANAGEMENT reacts when material usage is

reported. Since this is an automatic process initiated by the system whenever material usage is reported, there is no user interface.

The eighteenth section deals with reporting material inventory transactions to the Asset Management system. Certain types of inventory transactions, those that affect the dollars in the non-exempt holding account (12201100), must be reported to accounting. This section describes MATERIALS MANAGEMENT's daily interface to report such inventory transactions to Asset Management which maintains the 12201100 account. Since this is an automatic process initiated by the system on a daily basis, there is no user interface.

The nineteenth section deals with reporting current inventory units to Asset Management in the form of a reconciliation file so that any discrepancies in the accounting records may be corrected. Asset Management can make a request for the file at any time by providing the information necessary to create the report. Since this is an automatic process initiated by the system upon receipt of the necessary information from Asset Management, there is no user interface.

Business Solution 4

The purpose of MATERIALS MANAGEMENT Business Solution Area IV is to gain consensus on how material requirements are handled when the Jobentry-EWO application makes one or more of the following changes to substep (a substep is a breakdown of the work required on a job step).

(1)   Indicates that the material requirement is no longer needed either because the job or substep was deleted;

(2)   Changes the description of the material required on the substep;

(3)   Changes the custom features required on the substep (i.e., creating, updating, or deleting the custom features);

(4)   Changes the quantity of material required on the substep.

When a change is made to a substep, Jobentry-EWO checks the material status of the substep and, based on that status, decides whether or not to call a Materials Management function to handle any material that may have already been procured, (for the purposes of

this document, "procured" includes the following material statuses: Ordered, Shipped, Transfer Requested, and Transferred) or assigned to that substep. A substep can have one of the following material statuses:

(1)   Unnecessary – The substep requires no material;

(2)   Needed – All of the material required on the substep has not yet been procured; pending orders or transfers may exist or a partial assignment may exist, (a pending order or transfer is one in which the ordered or transferred material has not been received into inventory). If the remaining needed quantity on the substep is greater than zero but less than the substep's order quantity, the requirement is "partially satisfied";

(3)   Ordered – The material required on the substep has been ordered; a pending transfer or partial assignment may also exist. The substep obtains a material status of "ordered" because that is the method of procurement used last;

(4)   Shipped – The material required on the substep has been shipped; a pending transfer or partial assignment may also exist;

(5)   Transfer Requested – The material required on the substep has been requested for transfer; a pending order or partial assignment may also exist. The substep obtains a material status of "transfer requested" because that is the method of procurement used last;

(6)   Transferred – The material required on the substep has been transferred; a pending order or partial assignment may also exist;

(7)   Received – All of the material required on the substep has been received and assigned to the substep; no pending orders or transfers exist;

(8)   Disbursed – All of the material required on the substep has been reported and the substep is complete.

If a material requirement has changed (e.g., material description) and the substep has a material status of "needed", a call is made to Materials Management because the substep may be partially satisfied. If needed, any pending orders or transfers are disassociated from the substep and any material assigned to the substep is unassigned.

If the requirement is no longer needed (e.g., the substep is deleted) and the substep has a material status of "needed", a call is made to Materials Management only if the requirement has been partially satisfied; otherwise no call is made.

Regardless of the change made, if the substep has one of the "procured" material statuses, a call is made to Materials Management to disassociate any pending orders or transfers from the substep and to unassign any material that may be assigned to the substep.

Regardless of the change made, if the substep has a material status of "unnecessary", no call is made to Materials Management since material is not needed or the substep is complete. If the substep has a material status of "disbursed", Jobentry-EWO does not allow changes to be made.

The Materials Management function handles one type of change at a time. If multiple changes are to be made, the order in which the changes should be processed is as follows:

(1)   A change in material description or custom features;

(2)   A change in order quantity.

Depending on the nature of the change and the material status of the substep at the time of the change, one or more of the following may occur when a call is made to Materials Management:

(1)   Pending transfers may be disassociated from the substep – Disassociating the substep from its transfer will mean that any material transferred for that substep will be received into inventory as unassigned material upon delivery;

(2)   Pending orders may be disassociated from the substep – Disassociating the substep from its order will mean that any material ordered for that substep will be received into inventory as unassigned material upon delivery;

(3)   Material assigned to the substep may be unassigned—Unassigning the material from the substep means that the material is no longer reserved for use on that substep;

(4)   The remaining needed quantity on the substep may be adjusted; and

(5)   The material status of the substep may be changed.

After the material which has already been procured or assigned to the substep has been successfully handled, Jobentry-EWO may delete the substep, change the description of the material required, create/update/delete the custom features required, or change the quantity required.

MATERIAL REQUIREMENT IS NO LONGER NEEDED

A substep may be deleted when an engineer makes a revision to an approved job and the substep is no longer required or an entire job may be cancelled because of budget reasons, etc. If a substep is to be deleted or a job is to be cancelled, any material that has already been procured or assigned to the substep(s) must be handled. To do so, Jobentry-EWO provides the identifier of the substep, the substep's old order quantity, and a new order quantity equal to zero to the Materials Management function. (If cancelling a job, Jobentry-EWO must call this function for each substep requiring material within the job.) Passing a new order quantity of zero means that the requirement is no longer needed which prompts the system to take the appropriate action.

NEEDED OR PROCURED STATUS

If the material needed on a substep has already been procured or partially satisfied, any pending orders or transfers must be entirely disassociated from the substep and any material already assigned tot he substep must be unassigned as follows:

(1)   Transfer Request – If the substep has a pending transfer, the action taken by the system depends on whether or not the transfer request has been approved;

(a)   Unapproved – If the transfer request has not been approved, the substep is disassociated from the transfer request and, if the request was not made for any other substep, the transfer request is deleted because the inventory item has not yet been transferred. If the request was made to satisfy multiple substeps, the transfer request is not deleted so that it may still be approved for the remaining substeps for which it is needed. If multiple transfer requests exist, the system disassociates the substep from each transfer request found;

(b)   Approved – If the transfer request has been approved, the substep is disassociated from the transfer request, but the transfer request is not deleted because the inventory item has been transferred and may have been shipped. The transfer request must remain in existence so that the inventory item may be receipted. If multiple transfer requests exist, the system disassociates the substep from each transfer request found;

(2)   Order Request – If the substep has a pending order, the system changes the quantity to be assigned to the substep to zero. If multiple orders exist, the system changes the quantity to be assigned to the substep to zero on each order found;

(3)   Assignment – If the substep has an assignment, the system takes the following action:

(a)   Decreases the associated inventory item's assigned balance and increases its unassigned balance by the quantity assigned to the substep;

(b)   Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment found. If the inventory item is non-central office equipment and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

Disassociation occurs first from the transfers, then from the orders, and then from the assignments until the old order quantity has been disassociated or there are no more orders, transfers, or assignments from which to disassociate, whichever comes first.

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. (The fact that no disassociations or unassignments may be done is NOT considered an error.) If a flag of success is returned, Jobentry-EWO changes the status of the substep to "DE" (deleted).

RECEIVED STATUS

If the material needed on a substep has already been received, all of the material assigned to the substep must be unassigned as follows:

(1) The associated inventory item's assigned balance is decreased and its unassigned balance is increased by the quantity assigned to the substep;

(2) Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment found. If the inventory item is non-central office equipment and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-EWO changes the status of the substep to "DE" (deleted).

Changing THE MATERIAL DESCRIPTION or a CUSTOM FEATURE OF a substep

If the material description or custom feature is to be changed on a substep, any material that has already been procured or assigned to the substep(s) must be handled. To do so, Jobentry-EWO provides the identifier of the substep, the substep's old order quantity, and a new order quantity equal to the substep's old order quantity to the Materials Management function. Passing a new order quantity equal to the old order quantity means that the material description or a custom feature of the substep has changed which prompts the system to take the appropriate action.

NEEDED OR PROCURED STATUS

If the material needed on a substep has already been procured or partially satisfied, any pending orders or transfers must be entirely disassociated from the substep and any material already assigned to the substep must be unassigned as follows:

(1)   Transfer Request – If the substep has a pending transfer, the action taken by the system depends on whether or not the transfer request has been approved;

    (a)   Unapproved – If the transfer request has not been approved, the substep is disassociated from the transfer request and, if the request was not made for any other substep, the transfer request is deleted because the inventory item has not yet been transferred. If the request was made to satisfy multiple substeps, the transfer request is not deleted so that it may still be approved for the remaining substeps for which it is needed. If multiple transfer requests exist, the system disassociates the substep from each transfer request found;

    (b)   Approved – If the transfer request has been approved, the substep is disassociated from the transfer request, but the transfer request is not deleted because the inventory item has been transferred and may have been shipped. The transfer request must remain in existence so that the inventory item may be receipted. If multiple transfer requests exist, the system disassociates the substep from each transfer request found

(2)   Order Request – If the substep has a pending order, the system changes the quantity to be assigned to the substep to zero. If multiple orders exist, the system changes the quantity to be assigned to the substep to zero on each order found;

(3)   Assignment – If the substep has an assignment, the system takes the following action:

    (i)   Decreases the associated inventory item's assigned balance and increases its unassigned balance by the quantity assigned to the substep;

    (ii)   Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment found. If the inventory item is non-central office equipment and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

Disassociation occurs first from the transfers, then from the orders, and then from the assignments until the old order quantity has been disassociated and there are no more orders, transfers, or assignments from which to disassociate, whichever comes first.

After all orders, transfers, and assignments have been disassociated, the system resets the substep's remaining needed quantity back to the old order quantity and its material status back to "needed". If disassociation was not needed because the substep's remaining needed quantity was equal to the old order quantity, the system just sets the remaining needed quantity to the old order quantity and the material status to "needed".

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-EWO changes the material description required on the substep to the new material description or creates, updates, or deletes the custom feature required.

The new material may be procured using the methods described in Business Solutions I and II (BS1OVER.DOC and BS2OVER.DOC).

RECEIVED STATUS

If the material needed on a substep has already been received, all of the material assigned to the substep must be unassigned as follows:

(1)   The associated inventory item's assigned balance is decreased and its unassigned balance is increased by the quantity assigned to the substep;

(2)   Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment found. If the inventory item is non-central office equipment and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

After all material has been unassigned, the system resets the substep's remaining needed quantity back to the old order quantity and its material status back to "needed".

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-

EWO changes the material description required on the substep to the new material description or creates, updates, or deletes the custom feature required.

The new material may be procured using the methods described in Business Solutions I and II (BS1OVER.DOC and BS2OVER.DOC).

INCREASE THE ORDER QUANTITY OF A SUBSTEP

No matter what the material status of the substep, if the order quantity of a substep is to be increased, the substep's remaining needed quantity and its material status must be changed so that more material may be procured. To do so, Jobentry-EWO provides the identifier of the substep, the substep's old order quantity, and the substep's new order quantity to the Materials Management function. Passing a new order quantity greater than the old order quantity means that more material is needed which prompts the system to take the following action:

(1)　Increases the substep's remaining needed quantity by the difference between the new order quantity and the old quantity;

(2)　Resets the substep's material status to "needed".

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-EWO increases the substep's order quantity.

The additional material may be procured using the methods described in Business Solutions I and II (BS1OVER.DOC and BS2OVER.DOC).

DECREASE THE ORDER QUANTITY OF a substep

If the order quantity of a substep is to be decreased, any material that has already been procured or assigned to the substep(s) must be handled. To do so, Jobentry-EWO provides the identifier of the substep, the substep's old order quantity, and the substep's new order quantity to the Materials Management function. Passing a new order quantity less than the old order quantity means that less material is needed which prompts the system to take the appropriate action.

NEEDED STATUS

If the material needed on a substep has not been procured or has been partially satisfied, there remains some quantity still to be satisfied on the substep. If that is the case, the system decreases the substep's remaining needed quantity by the difference between the old order quantity and the new order quantity or by as much it can before decreasing the quantity to be assigned from any pending orders or transfers or before decreasing the quantity that may be already assigned to the substep.

If the substep's remaining needed quantity is not enough to satisfy the decrease in the quantity needed (remaining needed quantity < decrease in quantity), the system decreases the substep's remaining needed quantity by as much as it can until the remaining needed quantity reaches zero and then disassociates the difference from any pending transfers, pending orders, or assignments as follows.

(1) Transfer Request – If the substep has a pending transfer, the action taken by the system depends on whether or not the transfer request has been approved;

(a) Unapproved – If the transfer request has not been approved, the substep is disassociated from the transfer request by the quantity remaining to be decreased or by as much as it can, whichever is smaller. If the request was not made for any other substep, the transfer request is deleted because the inventory item has not yet been transferred. If the request was made to satisfy multiple substeps, the transfer request is not deleted so that it may still be approved for the remaining substeps for which it is needed. If multiple transfer requests exist, the system disassociates the substep from each transfer request found by the quantity remaining to be decreased until the decrease in quantity has been satisfied or there are no more transfer requests from which to disassociate;

(b) Approved – If the transfer request has been approved, the substep is disassociated from the transfer request by the quantity remaining to be decreased or by as much as it can, whichever is smaller, but the transfer request is not deleted because the inventory item has been transferred and may have been shipped. The transfer request must remain in existence so that the inventory item may be

receipted. If multiple transfer requests exists, the system disassociates the substep from each transfer request found by the quantity remaining to be decreased until the decrease in quantity has been satisfied or there are no more transfer requests from which to disassociate.

(2)   Order Request – If the substep has a pending order, the system decreases the quantity to be assigned to the substep by the quantity remaining to be decreased or by as much as it can, whichever is smaller. If multiple orders exist, the system decreases the quantity to be assigned to the substep on each order found by the quantity remaining to be decreased until the decrease in quantity has been satisfied or there are no more orders from which to disassociate.

(3)   Assignment – If the substep has an assignment, the system takes the following action:

(a)   Decreases the associated inventory item's assigned balance and increases its unassigned balance by the quantity remaining to be decreased;

(b)   Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment that was decreased. If the inventory item is non-central office equipment and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

Disassociation occurs first from the transfers, then from the orders, and then from the assignments until the decrease in quantity has been satisfied or there are no more orders, transfers, or assignments from which to disassociate, whichever comes first.

After all order, transfers, and assignments have been disassociated, the system adjusts the substep's material status to the appropriate value as follows:

(1)   If the quantity assigned to the substep is equal to the substep's new order quantity, its material status is set to "received";

(2)   If a pending order exists for the substep, its material status is set to "ordered";

(3) If an unapproved pending transfer exists for the substep, its material status is set to "transfer requested";

(4) If an approved pending transfer exists for the substep, its material status is set to "transferred".

If the entire decrease is taken from the substep's remaining needed quantity (remaining needed quantity $>=$ decrease in quantity), disassociation is not needed and the system adjusts the substep's material status to the appropriate value as follows:

(1) If the substep's remaining needed quantity is still greater than zero, its material status is set to "needed".

(2) If the quantity assigned to the substep is equal to the substep's new order quantity, its material status is set to "received".

(3) If a pending order exists for the substep, its material status is set to "ordered".

(4) If an unapproved pending transfer exists for the substep, its material status is set to "transfer requested".

(5) If an approved pending transfer exists for the substep, its material status is set to "transferred".

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-EWO decreases the substep's order quantity.

PROCURED STATUS

If the material needed on a substep has been procured, there is no quantity still to be satisfied on the substep. If that is the case, the system decreases the quantity to be assigned from any pending orders or transfers and decreases the quantity that may be already assigned to the substep by difference between the old order quantity and the new order quantity as follows:

(1) Transfer Request – If the substep has a pending transfer, the action taken by the system depends on whether or not the transfer request has been approved.

(a)   Unapproved – If the transfer request has not been approved, the substep is disassociated from the transfer request by the quantity remaining to be decreased or by as much as it can, whichever is smaller. If the request was not made for any other substep, the transfer request is deleted because the inventory item has not yet been transferred. If the request was made to satisfy multiple substeps, the transfer request is not deleted so that it may still be approved for the remaining substeps for which it is needed. If multiple transfer requests exist, the system disassociates the substep from each transfer request found by the quantity remaining to be decreased until the decrease in quantity has been satisfied or there are no more transfer requests from which to disassociate;

(b)   Approved – If the transfer request has been approved, the substep is disassociated from the transfer request, but the transfer request is not deleted because the inventory item has been transferred and may have been shipped. The transfer request must remain in existence so that the inventory item may be receipted. If multiple transfer requests exist, the system disassociates the substep from each transfer request found by the quantity remaining to be decreased until the decrease in quantity has been satisfied or there are no more transfer requests from which to disassociate.

(2)   Order Request – If the substep has a pending order, the system decreases the quantity to be assigned to the substep by the quantity remaining to be decreased or by as much as it can, whichever is smaller. If multiple orders exist, the system decreases the quantity to be assigned to the substep on each order found by the quantity remaining to be decreased until the decrease in quantity has been satisfied or there are no more orders from which to disassociate.

(3)   Assignment – If the substep has an assignment, the system takes the following action:

(a)   Decreases the associated inventory item's assigned balance and increases its unassigned balance by the quantity remaining to be decreased.

(b)   Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment that was decreased. If the inventory item is non-

central office equipment and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

Disassociation occurs first from the transfers, then from the orders, and then from the assignments until the decrease in quantity has been satisfied or there are no more orders, transfers, or assignments from which to disassociate, whichever comes first.

After all orders, transfers, and assignments have been disassociated, the system adjusts the substep's material status to the appropriate value as follows:

(1)   If the quantity assigned to the substep is equal to the substep's new order quantity, its material status is set to "received";

(2)   If a pending order exists for the substep, its material status is set to "ordered";

(3)   If an unapproved pending transfer exists for the substep, its material status is set to "transfer requested";

(4)   If an approved pending transfer exists for the substep, its material status is set to "transferred".

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-EWO decreases the substep's order quantity.

RECEIVED STATUS

If the material needed on a substep has already been received, the system decreases the quantity assigned to the substep as follows:

(1)   Decreases the associated inventory item's assigned balance and increases its unassigned balance by the difference between the old order quantity and the new order quantity;

(2)   Records an Unassignment material inventory transaction. If multiple assignments exist, the system creates an Unassignment material inventory transaction for each assignment that was decreased. If the inventory item is non-central office equipment

and ordered direct to code, the Unassignment transaction is marked to be sent to Asset Management; otherwise it is marked as not to be sent to Asset Management.

If no errors are found during this process, a flag of success is returned to the calling application; otherwise a flag of failure is returned. If a flag of success is returned, Jobentry-EWO decreases the substep's order quantity.

Business Solution 5

The MATERIALS MANAGEMENT Business Solution Area V deals with creating Management Reports. The business Solution area is composed of 7 reports as follows:

(1)   Order reports (This group of reports is comprised of 4 individual reports);

(2)   Transaction reports (This group of reports is comprised of 16 individual reports);

(3)   Issue Summary Report;

(4)   Major Material Activity Report;

(5)   Material Notification Report;

(6)   Over-Age Material Report

(7)   Investment Management Report (IMR)

Each report is described in a separate section of the document. Each section provides a description of the report and its purpose, a description of how the report may be requested, and a report layout and description of each field on the report. The purpose of this document is to gain consensus as to the deliverable for MATERIALS MANAGEMENT business Solution Area V.

The first section describes the types or Order reports that are available. This report contains information about orders for a specified status. You may print the report for a state, Construction Management Center (CMC), or inventory site.

The second section describes the types of Transaction reports that are available. This report contains information about material inventory transactions for a specified type. You may print the report for a state, CMC, or inventory site.

The third section describes the Issue Summary Report. This report contains information about inventory items that are currently issued. You may print the report for a state, CMC, or inventory site.

The fourth section describes the Major Material Activity Report. This report contains information about material inventory transactions that involve movement of material in and out of inventory, excluding receipts and disbursements. You may print the report for a state, CMC, or inventory site.

The fifth section describes the Material Notification Report. This report contains information about the material currently assigned to a job. You may print the report for a job and/or resource id.

The sixth section describes the Over-Age Material Report. This report contains information about material that will be over 30 days old because of a scheduling change. This includes material that is 1) on order that, once receipted, will be in inventory for over 30 days before it used and 2) assigned material that will be in inventory for over 30 days before it is used. You may print the report for an inventory site only.

The seventh section describes the Investment Management Report. This report provides an index which measures how efficient inventory is managed. The index describes how much inventory was owned over a given period of time and how much it cost the company to own that inventory. You may print the report for a state, CMC, or inventory site.

DESCRIPTION:

The outside Plant Construction Management (OSPCM^{TM}) system was developed by BellSouth and is used in conjunction with the construction of communication facilities. Bid & Award is designed to mechanized the bidding process and involves three main aspects of Outside Plant Vendor Master Contract and how they are initially setup and defined in the BellSouth Computer System (OSPCM^{TM}). These aspects are the contract itself, potential contractors with associated information and some parameter maintenance information to

administer the BID/AWARD area. Individual Contractors, submitted and discussed in another request for patent area, uses the BID and AWARD module in the bid process.

BID AND AWARD PROCESSES:

Designed to mechanize the bidding process:

(1)   STORES ALL INFORMATION ABOUT QUALIFIED CONTRACTORS;

(2)   TAKES EXISTING USAGES TO DETERMINE VOLUME OF THE CONTRACT

(3)   USES OTHER OSPCM INFORMATION TO DETERMINE GEOGRAPHICAL BOUNDARIES OF THE CONTRACT;

(4)   SELECTS QUALIFIED CONTRACTORS FOR BIDS;

(5)   SELECTS DOCUMENTS FROM REGIONAL CONTRACT MODULE FOR BIDS;

(6)   PREPARES A BID PACKAGE WHICH IS BASED ON PC DISK

(7)   AUTOMATES THE RECEIPT OF BIDS BASED ON INPUT FROM DISK INFORMATION PROVIDED BY THE CONTRACTOR

(8)   BUILDS TABLES NECESSARY FOR OTHER OSPCM EXECUTABLES TO WORK BASED ON BID AWARD

Location of the Input Price Worksheet:

(1)   ALLOWS ACCESS TO THE ESSENTIAL PRICE DATA BEHIND EACH CONTRACTOR'S BID (MASTER & INDIVIDUAL)

(2)   ALLOWS THE COORDINATOR TO CONTROL THE STATUS OF THE BIDS AND TO AWARD THE CONTRACT

Maintains government Price Increase Construction (PIC) figures, BellSouth PIC figures, and Inspection Pools. The PIC figures are used with the automatic price adjustment processes. The inspection pools are used to define a geographic area in which to monitor the performance of a contractor and establish some of the parameters that batch processes will use for sampling a contractor's completed work. The inspection pool and parameters must be defined in the system.

BENEFITS:

The BID and AWARD processes were designed to mechanize the bidding process, enhance the sampling (inspection) process, maintain prices for new and existing master and Individual bid contracts, and execute the use of PIC figures on annual PIC increases for existing master contractors. Without BID and AWARD mechanized contract bidding, the contractor quality program (inspections), Individual Contract bidding, and annual Price Increase Construction (PIC) increases would not be possible.

FUNCTIONAL SPECIFICATION MODULE: PRICING

Table For Business Transaction Description

Business Transaction Name:	Generate Price for Detailed Job
Purpose:	This transaction describes the activities needed to generate a priced Detailed job for Outside Plant Construction and Maintenance.
Functional Specification(s):	Pricing – RPT 502 GUI – Detailed Added Cost
User Interfaces:	RPT: Detailed Construction Details – 502 SCR: Detailed Added Cost SCR: Pricing Reports SCR: View Reports SCR: View Reports for Job
External Agent(s):	Job Entry
Trigger(s):	Job details via data store

Operational Method:	The Design Engineer selects an encoded job to be priced in detail. Added costs that were not captured during encoding are input through the Detailed Added Cost graphical user interface (GUI).
	The user then generates the Detailed Pricing 502 Report. Each substep's materials, labor, engineering and contractor resources will be priced. A message will be sent to the user's terminal when the process completes. The user will have the ability to view the report on-line. Any errors encountered will be directed to the errors section of the Detailed Pricing 502 Report.
Operational Standard (Timing):	The time required to create a Detailed Pricing 502 Report should not exceed 15 minutes.
Operational Standard (Quality):	100% of all Detailed Pricing 502 Report requests should be satisfied.

Table For Procedure Description

Procedure Name:	Enter Detailed Added Costs – ONL
Definition:	This procedure will allow a user to enter Detailed added costs. These miscellaneous costs were not captured during the encoding process but are components of the OSP job.

The user enters a job or project number and selects the Detailed Added Cost GUI. Miscellaneous material, retirement, labor, contractor, engineering and other costs are entered into the system and saved. The job or project number will be used by the system to associate the saved added costs with the encoded job. The system will add the cost of each item entered to the total cost of the job.

Triggers: Detailed added costs via terminal

Frequency/Distribution: Twice per week per Design Engineer

Operational Standard (Timing): NA

Operational Standard (Quality): Each cost item entered should be added to the total cost of the job.

Security and Access: Design Engineer, Clerk. Construction supervisors should not have access to Pricing.

Design Complexity: Medium.

Referenced Data:

Field Name: CMC
The Construction Management Center where the job originated. This is retrieved from the original user entry requesting a new job.

Job Number: The unique number given to the encoded job. This is

retrieved from an OSPCM database.

Project Number: The project number given to the encoded job. This is retrieved from an OSPCM database.

Billing: Indicates that the item will be billed to the customer.

Total Adjustment %: The percentage by which the total cost of the job will be adjusted. This is retrieved from an OSPCM database.

FRC: The Field Reporting Code associated with the particular job. This is retrieved from an OSPCM database.

GLC: The Geographic Location Code associated with the particular job.

Cost Type The cost category that each item listed in the item description falls into.

Description The description of the added cost item

Estimated Cost The estimated cost of the item listed in the item description field. Initially this will be a user input field.

Engineering Hours The total number of engineering hours to be used on the job.

Labor Hours The total number of labor hours to be used on the job.

Business Rules: Field Reporting Code must exist in an OSPCM database.

Geographic Location Code must exist in an OSPCM database.

Cost Type must be MATL, RETR, LABR, CONT, ENGR or OTHR

Estimated Cost must be numeric.

Procedure Name:	Run Detailed Construction Details Report 502 – ONL

Definition:

This procedure allows the user to calculate a Detailed price for a job. The user enters the Construction Management Center (CMC) and a Job or Project Number and initiates the report run. The system uses the Detailed Pricing data entered into the system during Job Entry as well as any added cost or supplement data that exists for the job in order to calculate a price for the job.

The system will notify the user when the Detailed pricing process has completed. If the process fails the user will receive notification on-line.

A user can run a Detailed job report several times in order to get the desired price. The system will overlay the previous unapproved 502 report with each subsequent report.

Triggers:

Report request via terminal

Frequency/Distribution:		Twice per week per Design Engineer		

Operational Standard (Timing): A Detailed Pricing report request should be satisfied within 1 hour.

Operational Standard (Quality): The timing standard should always be met and the user should be notified of the report completion or failure.

Security and Access: Design Engineer, Clerk. Construction Supervisors should not have access to Pricing.

Design Complexity: Very Difficult.

Table For Referenced Data:

Field Name	Entity Type	Attribute	Req/Opt/Cond	Source
	CPR Item	Lead Salvage Amount	Opt	OSPCM Table
	CPR State Book Value	Vintage Retirement Unit Cost Amount	Opt	OSPCM Table
	Field Reporting Code	Code	Req	OSPCM Table
	Job Authority Cost	Contractor Labor	Cond	OSPCM Table
	Job Authority Cost	Contractor Provided Material Amount	Cond	OSPCM Table
	Labor Rate	Amount	Req	OSPCM Table
	Labor Rate	End Date	Req	OSPCM Table
	Labor Rate	Start Date	Req	OSPCM Table
	Labor Rate	Type Code	Req	OSPCM Table
	Labor Type	Code	Req	OSPCM Table

Field Name	Entity Type	Attribute	Req/Opt/Cond	Source
	Lump Sum Contract Work Item	Amount	Opt	OSPCM Table
	Material Item	Description	Req	OSPCM Table
	Material Item	Fiber Quantity	Req	CORTS
	Material Item	Pair Quantity	Req	CORTS
	Material Item	Average Disbursed	Req	CORTS
	OSP Contract Work Item Price	Amount	Req	OSPCM Table
	Pair Quantity	Product Identification Number	Req	OSPCM Table
	State Field Reporting Code	Contractor Exempt Material Rate	Cond	OSPCM Table
	State	Supply Expense Percent	Cond	OSPCM Table
	State	Exempt Equivalent Labor Hrs Percent	Cond	OSPCM Table
	State Field Reporting Code	Engineering Labor Percent	Req	OSPCM Table
	State Field Reporting Code	Engineering Overhead Percent	Cond	OSPCM Table
	State Field Reporting Code	Labor Overhead Percent	Cond	OSPCM Table
	State Field Reporting Code	Telco Exempt Material Rate	Cond	OSPCM Table
	Substep	Contract Work Indicator	Req	OSPCM Table
	Substep	Geographic Location Code (GLC)	Req	OSPCM Table
	Substep	Placed in Service Date	Req	OSPCM Table
	Substep	Total Contract Hours Quantity	Opt	OSPCM Table
	Substep	Total Telco labor Hours Quantity	Opt	OSPCM Table
	Substep Contract	Base Unit Quantity	Req	OSPCM Table

Field Name	Entity Type	Attribute	Req/Opt/Cond	Source
	Work Item			
	Substep Material Requirement	Unit Quantity	Req	OSPCM Table

CMC: The Construction Management Center where the job originated. This is retrieved from the original user entry requesting a new job.

Job Number: The unique number given to the encoded job. This is retrieved from the original user entry requesting a new job.

Project Number: The project number given to the encoded job. This is retrieved from the original user entry requesting a new job.

Non-List Code: Indicates that a material item will not be found in an OSPCM database.

Number Cable Splices: This is the number of cable splices for a material item in a particular FRC. This is used to calculate a cost for the job.

Telco Placing Hours: The number of telco hours it will take to place the item listed in the Item Description field. This is retrieved from an OSPCM database.

Env: The environment in which the item will be put into service.

Year: The year that the item was placed into service. This is retrieved from an OSPCM database.

Retirement Value Cost: The retirement value per unit of the item in the Item Description Field.

Salvage Value Cost: The salvage value per unit of the item in the Item Description field. This is retrieved from an OSPCM database.

Telco Removal Hours: The number of Telco labor hours it would take to remove the item described in the Item Description field. This is retrieved from an OSPCM database.

Telco Removal Cost: The Telco cost of removal per item in the Item Description field. This is retrieved from an OSPCM database.

Contractor Removal Cost: The contractor cost of removal per item in the Item Description field. This is retrieved from an OSPCM database.

Supplemental Costs: Costs that will be authorized over the established threshold cost for an OSP job.

Grand Total Additions: The calculated total cost of all material, labor, contractor, and engineering resources to add to, maintain, or repair

the OSP.

Total Materials Additions: The calculated total material cost to add to, maintain, or repair the OSP.

Total Labor Additions: The calculated total labor cost to add to, maintain, or repair the OSP.

Total Contract Additions: The calculated total contractor cost to add to, maintain, or repair the OSP.

Total Engineering Additions: The calculated total contractor cost to add to, maintain, or repair the OSP.

Grand Total Retired Material Amount: The calculated total retirement value of material removed from the OSP.

Salvaged Material Amount: The scrap value of material being retired from the OSP.

Grand Total Cost of Removal: The calculated total cost of removing material from the OSP.

Total Labor Retirements: The calculated total labor cost for retiring material from the OSP.

Total Contract Retirements: The calculated total contractor cost for retiring material from the OSP.

Total Engineering Retirements: The calculated total engineering cost for retiring material from the OSP.

Telco Provided Material Amount:	The calculated amount of material provided by telco for a job.
Contractor Provided Material Amount:	The calculated cost of exempt contractor materials.
Telco Exempt Material Cost Amount:	The calculated amount of material provided by contractors for a job.
Contractor Exempt Material Cost Amount:	The calculated cost of exempt telco materials.
Supply Expense Cost Amount:	The calculated amount of supply expense per FRC.
Material Requirements Unit Quantity:	The amount of material needed for a certain work action. This is retrieved from an OSPCM database.
Material Disbursed Price Amount for All Associated Material Requirements:	The price of material used in the work action. This is retrieved from an outside system.
Contract Work Item Base Unit Quantity:	The number of hours of contract labor needed for a certain work action. This is retrieved from an OSPCM database.
OSP Contract Work Item Price Amount:	The price of contract work on an Outside Price Item. This is retrieved from an OSPCM database.
Total Telco Labor Hours Quantity:	The total number of telco labor hours needed for a certain work action. This is retrieved from an OSPCM database.
State FRC Telco Exempt Material Rate:	The telco exempt material rate based on state. This is retrieved from an OSPCM database.

State Exempt Equivalent Labor Hours Percentage:

The equivalent labor hours percentage based on state. This is retrieved from an OSPCM database.

Placing Labor:

The number of labor hours required to place a piece of material. This is retrieved from an OSPCM database.

Splicing Labor:

The number of labor hours required to splice a piece of cable. This is retrieved from an OSPCM database.

Other Labor:

The number of labor hours required to do tasks other than splicing and placing. This is retrieved from an OSPCM database.

Labor Adjustment:

The adjustment applied only to labor costs. This is retrieved from an OSPCM database.

Cost Adjustment Labor:

The labor portion of the global job adjustment. This is retrieved from an OSPCM database.

Cost of Removal Dollars Per Unit:

The per unit cost to remove a piece of material from the OSP. This is retrieved from an OSPCM database.

Telco Labor Amount:

The calculated amount of telco labor used for a job. This is retrieved from an OSPCM database.

Labor Rate Amount

The rate at which labor is charged. This is retrieved from an OSPCM database.

Contractor Labor Amount:

The amount of contractor labor hours needed to perform

	a certain work action. This is retrieved from an OSPCM database.
Contract Work Item Base Unit Quantity:	The quantity of work contractors will perform for a particular work action. This is retrieved from an OSPCM database.
OSP CWI Price Amount:	The price to be paid for the associated contract work item within an OSP contract. This is retrieved from an OSPCM database.
Telco Engineering Cost	The calculated cost of telco engineering for the OSP job.
Engineering Cost Amount:	The calculated cost of engineering for the OSP job.
State Field Reporting Code Engineering labor Percent:	The engineering labor percentage based on state. This is retrieved from an OSPCM database.
Retired Material Amount:	The retirement value of material being removed from the OSP.
CPR Book Value Amount for all associated Material Requirements:	The continuing property record material retirement value. This is retrieved from an OSPCM database.
CPR Item Lead Salvage Amount for all associated Material Requirements:	The continuing property record material salvage value. This is retrieved from an OSPCM database.
Total Supplement:	The total supplement that was approved for a particular job.
Supplement Material:	The material cost of the approved supplement. This is retrieved from an OSPCM database.

Supplement Telco Engineering:	The telco engineering cost of the approved supplement. This is retrieved from an OSPCM database.
Supplement Telco Labor:	The telco labor cost of the approved supplement. This is retrieved from an OSPCM database.
Supplement Contractor Engineering:	The contractor engineering cost of the approved supplement. This is retrieved from an OSPCM database.
Supplement Contractor labor:	The contractor labor cost of the approved supplement. This is retrieved from an OSPCM database.
Supplement Retirement:	The retirement cost of the approved supplement. This is retrieved from an OSPCM database.
Supplement Salvage:	The salvage cost of the approved supplement. This is retrieved from an OSPCM database.
Supplement Other:	The other costs of the approved supplement. This is retrieved from an OSPCM database.
Overhead Labor:	This is a calculated additional cost added to the Grand Total for each FRC if the job is being billed to a customer.
Overhead Labor Factor:	The factor that overhead labor hours is multiplied by to generate an overhead labor cost. This is retrieved from an OSPCM database.
Overhead Engineering:	This is a calculated additional cost added to the Grand Total for each FRC if the job is being billed to a customer.
Overhead Engineering Factor:	The factor that overhead engineering hours is multiplied by to generate an overhead engineering cost. This is retrieved from an OSPCM database.

Total Million Conductor Feet:	The calculated number of conductor feet (in millions) of cable.
Fiber Kilofeet:	The calculated number of fiber kilofeet of cable.
Material Size:	The size of the material to be placed for a certain job. This is retrieved from an OSPCM database.
Total Contract:	The calculated total cost of contractor work for a job.
Total Engineering:	The calculated total cost of engineering work for a job.
Gross Expenditures:	The calculated gross expenditure dollars for a job.
Total Cost of Removal:	The calculated total cost of removal dollars for a job.
Total Gross Additions	The calculated total gross additions dollars for job.
Net Requirements:	The calculated net required dollars for a job.
Total Salvage Value:	The calculated total scrap value of material being retired from the OSP.
Net Additions:	The calculated net additions dollars for a job.
Total Plant Retired:	The calculated total retirement value of all material being retired from the OSP.
Total Overhead Engineering	The calculated total overhead engineering costs added to a job.
Gross Additions:	The calculated gross additions by plant type.

Plant Retired: The calculated retirement value of materials by plant
                                  type.

Salvage: The calculated salvage value of materials by plant type.

Cost of Removal: The calculate cost of removal by plant type.

Maintenance: The calculated maintenance cost by plant type.

Business Rules: Detailed job information must exist for a job.

                                  The 502 report will be sorted by FRC.

                                  Four categories of cost will be identified on the report:
                                  Material, Labor, Engineering and Contract.

                                  The Cost Type associated with each Detailed line will be
                                  examined and the cost associated with that line will be
                                  directed to the appropriate report category: Material,
                                  Labor, Engineering or Contract.

                                  Grand Total Additions = Total Materials Additions +
                                          Total Labor Additions + Total Contract
                                          Additions + Total Engineering Additions

                                  Grand Total Retired Material Amount and Salvaged
                                          Material Amount = carry down of the subtotal for
                                          each.

Grand Total Cost of Removal = Total Labor Retirements + Total Contract Retirements + Total Engineering Retirements

Total Material Additions = Telco Provided Material Amount + Contractor Provided Matl Amount + Telco Exempt Material Cost Amount + Contractor Exempt Matl Cost Amt + Supply Expense Cost Amount + Cost Adjustment Material

Telco Provided Material Amount = Sum of: Substep Material Requirements Unit Quantity * Material Item Group Cost Average Disbursed Price Amount for all associated Substep Material Requirements

Contractor Provided Matl Amount = Substep Contract Work Item Base Unit Quantity * OSP Contract Work Item Price Amount

Telco Exempt Material Cost Amount – Sum of: substeps Total Telco Labor Hours Quantity * State FRC Telco Exempt Material Rate

Contractor Exempt Matl Cost Amt = (Job Authority Contractor Provided Material Amount + Job Authority Contractor Labor Amount) * State Exempt Equivalent Labor Hours Percentage * State Field Reporting Code Contractor Exempt Material Rate.

Supply Expense Cost Amount = Telco Provided Material Amount + Telco Exempt Material Cost Amt + Contractor Exempt Matl Cost Amt) * State Supply Expense Rate

Total Labor Additions = Placing Labor + Splicing Labor + Other Labor + Labor Adjustment + Cost Adjustment Labor

Total Labor Retirements = Sum of: (Cost Removal Dollars Per Unit * Substep Material Requirement Unit Quantity) + Labor Adjustment + Cost Adjustment Labor

Telco Labor Amount = Sum of: Substeps Total Telco Labor Hours Quantity * Labor Rate Amount (For State with Type Code – Telco)

Total Contract Additions = sum, over all Detailed input lines whose cost type is MATL or CONT, of the products (Substep Contract Work Item Base Unit Quantity * OSP Contract Work Item Price Amount)

Total Contract Retirements = sum, over all Detailed Retirement input lines whose Contractor Removal Cost line is populated, of the products (Substep Contract Work Item Base Unit Quantity * OSP Contract Work Item Price Amount)

Contractor Labor Amount = Sum of: (Substep Contract
Work Item Base Unit Quantity * OSP Contract
Work Item Price Amount)) + all Lump Sum CWI
amount.

Engineering Cost Amount = (Telco Labor Amount +
Contractor Labor Amount) * State Field
Reporting Code Engineering Labor Percent

Other Cost Amount = Right-of-Way expense or any kind
of miscellaneous cost

Retired Material Amount = Sum of: Substep Material
Requirements Unit Quantity * CPR Book Value
Vintage Retirement Unit Cost Amount for all
associated Substep Material Requirements

Salvaged Material Amount = Substep Material
Requirements Unit Quantity * CPR Item Lead
Salvage Amount for all associated Substep
Material Requirements

Total Supplement = Supplement Material + Supplement
Telco Eng. + Supplement Telco Labor +
Supplement Cont. Eng. + Supplement Cont.
Labor + Supplement Retirement + Supplement
Salvage + Supplement Other

Overhead Labor = (Placing Labor + Splicing Labor +
Other Labor + Labor Adjustment + Cost
Adjustment Labor) * State Field Reporting Code

Labor Overhead Percent. Only calculated for billing jobs.

Overhead Engineering = Telco Engineering Cost * State Field Reporting Code Engineering Overhead Percent. Only calculated for billing jobs.

The following algorithms are calculated as a total for all FRCs:

Total Million Conductor Feet = (2 * (Matl size from OSPCM Table or from user input # pairs) * (Quantity from user input)) / 1,000,000

Fiber Kilofeet = (Matl size from OSPCM Table or from user input # pairs) * (Quantity from user input)) / 1,000

Total Contract = sum over all FRCs for Total Contract Additions + Total Contract Retirements

Total Engineering = sum over all FRCs for Total Engineering Additions + Total Engineering Retirements

Gross Expenditures = Total Gross Additions + Total Cost of Removal

Net Requirements = Total Gross Additions + Total Cost of Removal Total Salvage Value

Net Additions = Total Gross Additions – Total Plant
Retired

Total Overhead Labor = sum over all FRCs for Total
Overhead Labor

Total Overhead Engineering = sum over all FRCs for
Total Overhead Engineering

The following algorithms will be calculated by Plant
Type where there could be many FRCs to one
Plant Type:

Gross Additions = Sum, over the 'C' FRCs within a
particular Plant Type, of the amount computed
for Grand Total Additions

Plant Retired = Sum, over the 'X' FRCs within a
particular Plant Type, of the amount computed
for Grand Total Retirements

Salvage = sum, over 'X' FRCs within a particular Plant
Type, of the amount computed for the Total
Salvage Value Amount

Cost of Removal = Sum, over the 'X' FRCs within a
particular Plant Type, of the amount computed
for the Total Cost of Removal

Maintenance = Sum, over the 'M' or 'R' FRCs within a
particular Plant Type, of the amount computed

for Grand Total Maintenance

Table For Procedure Description

Procedure Name:	View 502 Detailed Construction Details Report – ONL
Definition:	This procedure will allow a user to view a list of the pricing reports that have been run for a specific Job Number. From this list the user is able to select a report for viewing. The user must supply CMC and Job Number or Project Number to obtain the list. The list can be narrowed further by entering an Engineer's Initials. The system will use Job Number of Project Number and Engineer's Initials when retrieving the report.
Triggers:	Successful report run notification via terminal.
Frequency/Distribution:	Twice per week per Design Engineer
Operational Standard (Timing):	Delay time for displaying the report should not exceed 4 seconds.
Operational Standard (Quality):	100% of all view 502 report requests should be satisfied
Security and Access:	Design Engineer, Clerk. Construction Supervisors should not have access to Pricing.
Design Complexity:	Medium

Referenced Data:

    The Construction Management Center where the job originated. This is retrieved from the original user entry requesting a new job.

Job Number:

    A unique number, within a CMC, given to an OSP job. This is placed into an OSPCM database.

Project Number:

    A unique number given to an OSP job. This is placed into an OSPCM database.

Engineer's Initials:

    The initials of the engineer who enters the job for broadgauge pricing. This is retrieved from an OSPCM database.

Business Rules:

    CMC and Job Number or Project Number must exist in OSPCM databases.